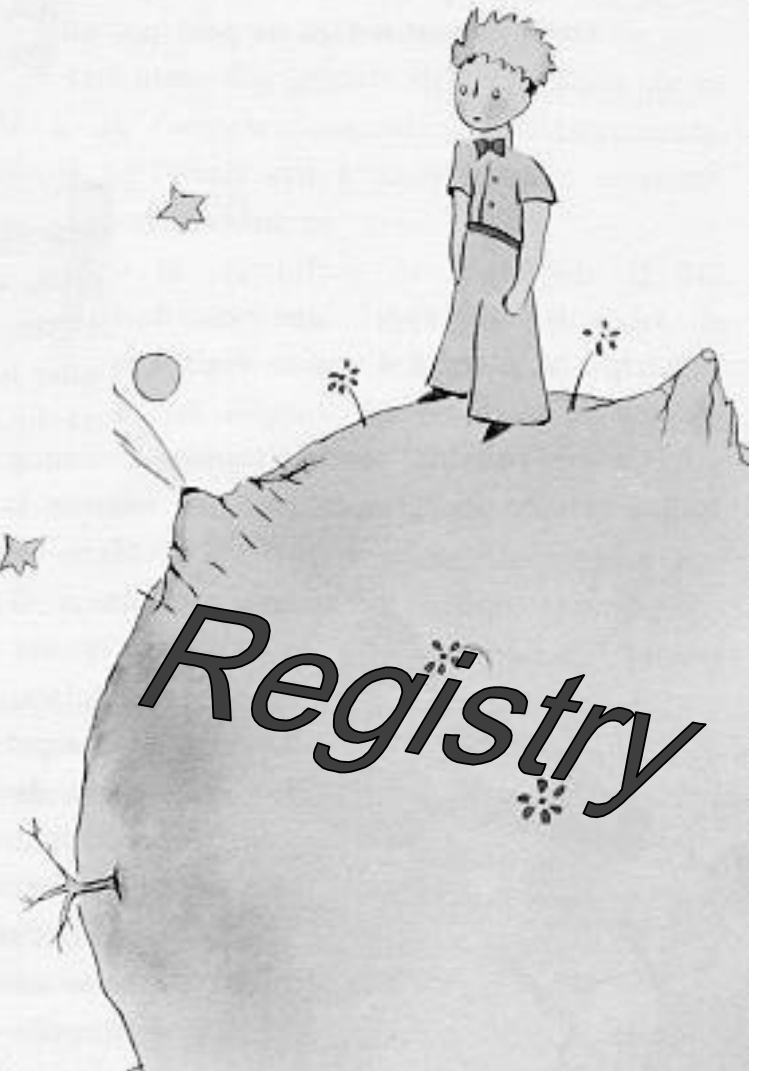
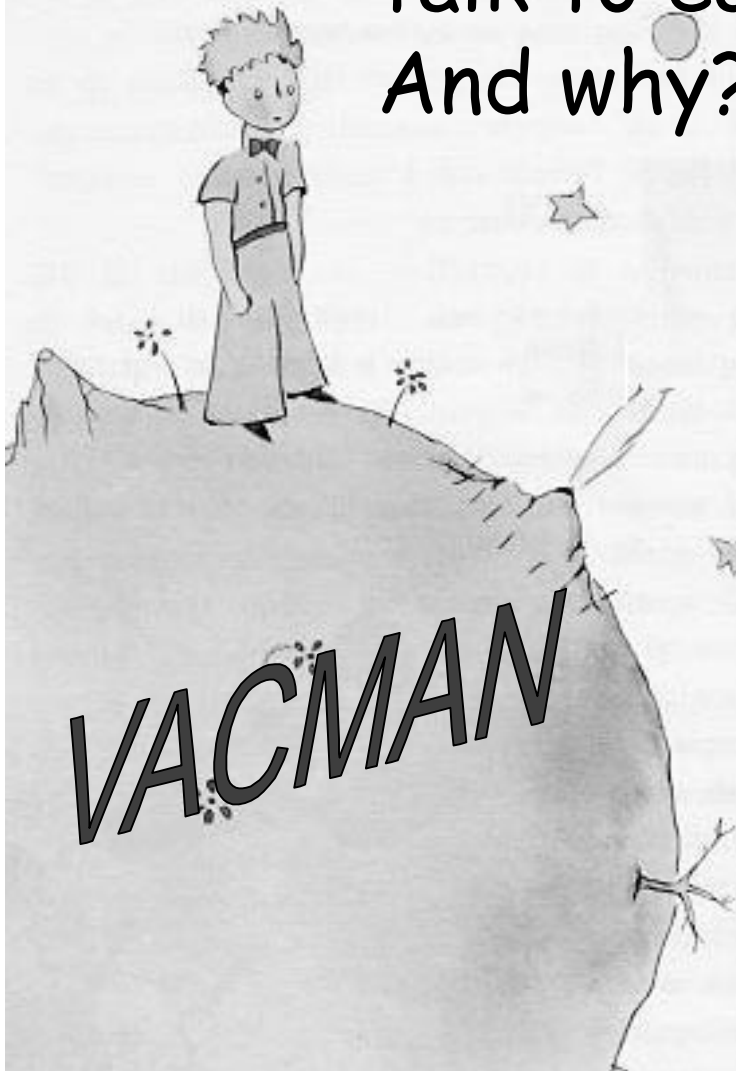


# VACMAN - Registry Interface

Presented by  
**Sandra Kelsey**  
New Hampshire Immunization Program  
and  
**Evan Willis**  
National Immunization Program

VFC III Regional Workshops  
April 1999

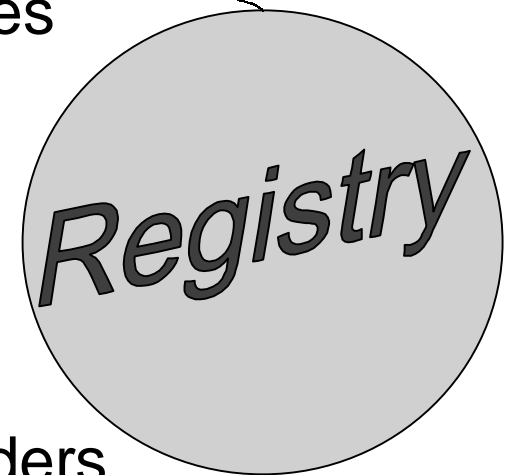
How can VACMAN and your  
immunization registry  
talk to each other?  
And why?



## Why?

The types of data that you may want to exchange:

- \* New provider vaccine orders (to be shipped by Depot, and Varicella to be shipped by Merck)
- \* Provider inventory adjustments (“Other Transactions”): wasted, expired, spoiled
- \* New or updated provider profiles
- \* Doses administered data



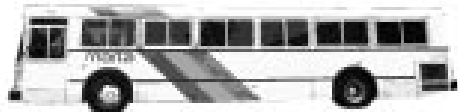
- \* Status of provider vaccine orders
- \* Inventory available at Depot

## How?

There are two methods for exchanging data:

### Batch

- \* Semi-automatic process
- \* Download data to a file; then upload data from file to other system
- \* Uses VACMAN Import and Export Utilities, and Registry batch process



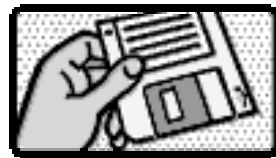
### Real-time

- \* Automatic process
- \* Instantly transfer data between the two systems
- \* Uses VACMAN.DLL Interface Component installed on Registry
- \* Used by ImmPact, Maine/N.H. Registry



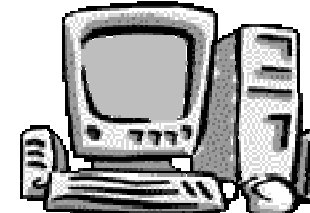
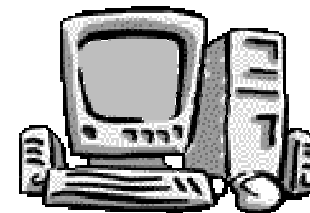
# Batch

Immunization Registry generates output file and/or reads input file.



VACMAN  
Import / Export  
Utilities

# Real-time

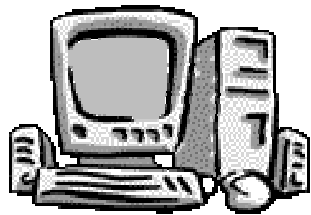


Immunization Registry calls Interface Component, which in turn connects to and exchanges data with VACMAN.

## Technical Stuff:

The Interface Component is an Active-X file called VACMAN.DLL. This file is registered on the Registry server. Data is exchanged using Microsoft ODBC FoxPro Driver. All data exchange is initiated by Registry.

# Real-time interface...up close

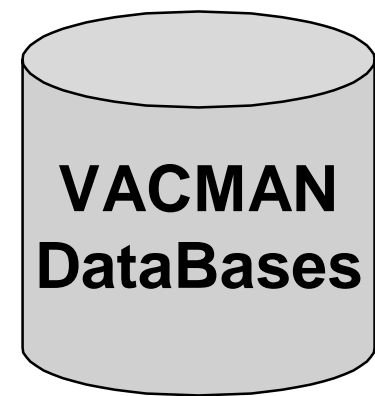


**Registry**

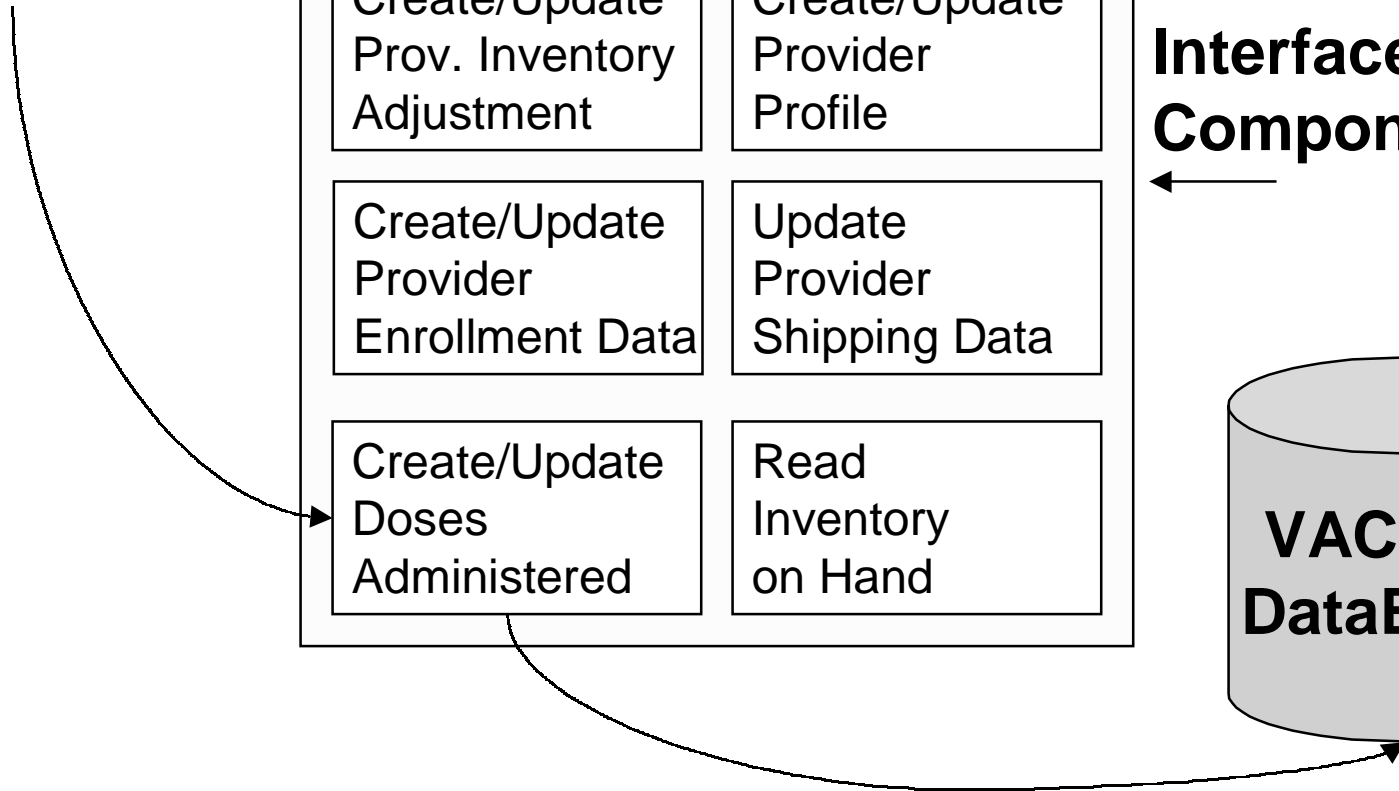
Create/Update Depot Provider Vaccine Order	Create/Update Varicella Vaccine Order
Create/Update Prov. Inventory Adjustment	Create/Update Provider Profile
Create/Update Provider Enrollment Data	Update Provider Shipping Data
Create/Update Doses Administered	Read Inventory on Hand



**Active-X  
Interface  
Component**



**VACMAN  
DataBases**



# ImmPact

## A Tool for Providers

*Using ImmPact  
in Your Practice*



**ImmPact**

*New Hampshire's Immunization Information System*

# A National Model

ImmPact is the first in the United States...

- to involve private providers
- to use the security and utility of the internet
- to offer electronic inventory management



**ImmPact**

*New Hampshire's Immunization Information System*



# Is it safe using the internet?

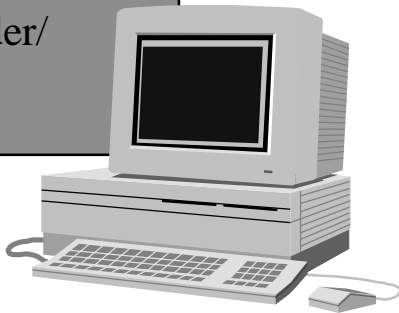
- Studies show that locally-stored data is more vulnerable to security breaches
- All data backed-up and stored off-site
- Encryption software used by the Department of Defense
- Secured Socket Layer (SSL) controls access



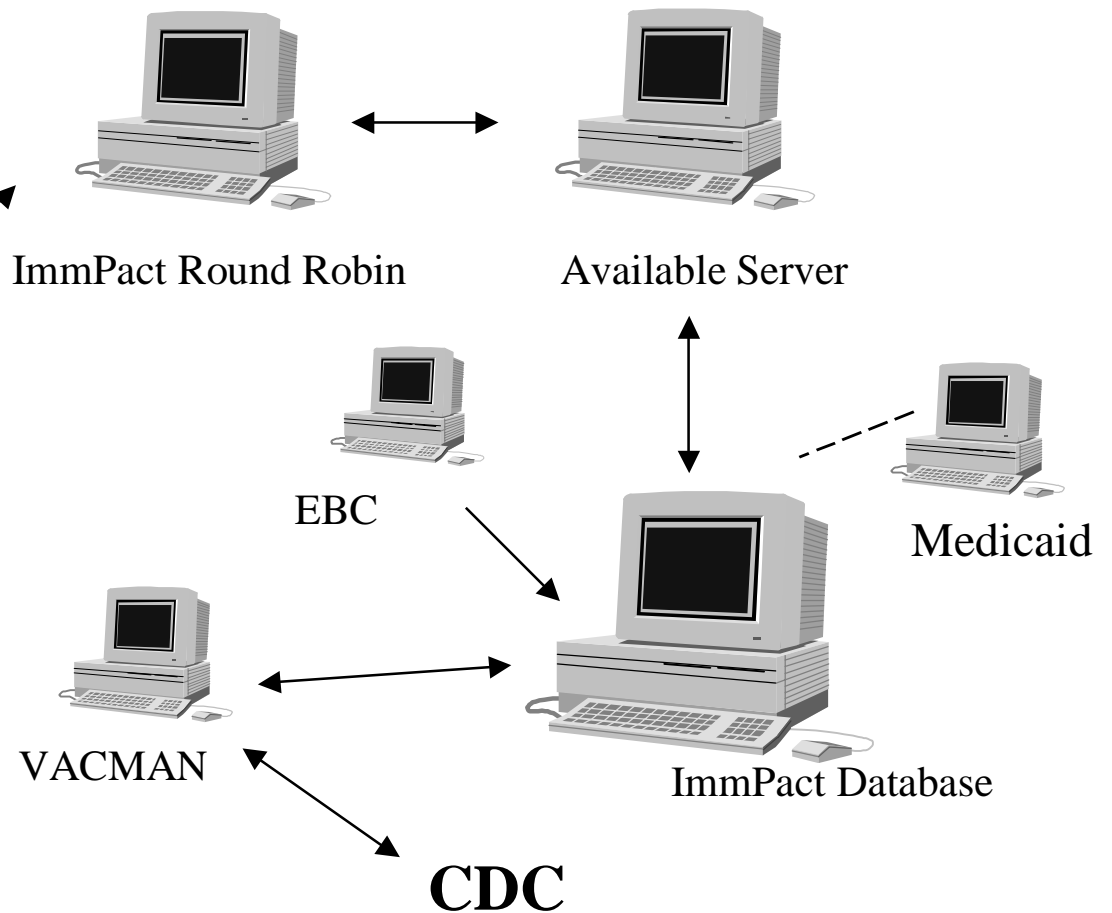
# Registry Architecture

## Provider Level

- Immunization Administration
- Inventory Management
- Reminder/Recall

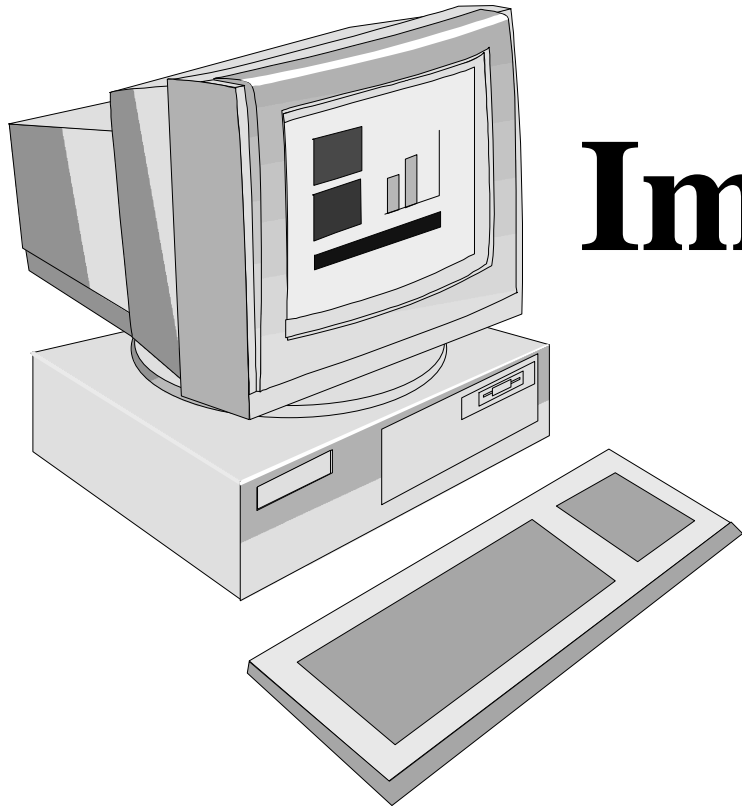


## State Level



**ImmPact**

*New Hampshire's Immunization Information System*



# ImmPact Screens

**ImmPact**

*New Hampshire's Immunization Information System*

# Vaccination Record

ImmPact - Patient Information - Microsoft Internet Explorer provided by Sapient Corporation

File Edit View Go Favorites Help Links

ImmPact (PRACTICE) HARBORSIDE FAMILY PRACTICE, YARMOUTH, ME - 1002 06/11/1998 ?

Main Menu Patient Information Practice Information Inventory Management Reminder/Recall Log Out

## Vaccination Record

**Orlando Hernandez**

Date of Birth	SSN	Next Appointment Due Date
10/10/1970		
Insurance Carrier	Gender	Recommended Vaccine Date
	M	

### Valid Doses

Vaccine

### All Doses

Vaccine	Dose	Date	Given	Lot Number	Site	Route	Administered By
---------	------	------	-------	------------	------	-------	-----------------

### Exemptions

Vaccine Type	Reason	Start Date	Expiration Date	Date Recorded
MMR	Permanant Medical	06/09/1998	06/09/1998	06/09/1998

### Bright Futures History

Bright Futures	Visit	Visit Date	Comments	Assessment Form	Administered By
----------------	-------	------------	----------	-----------------	-----------------

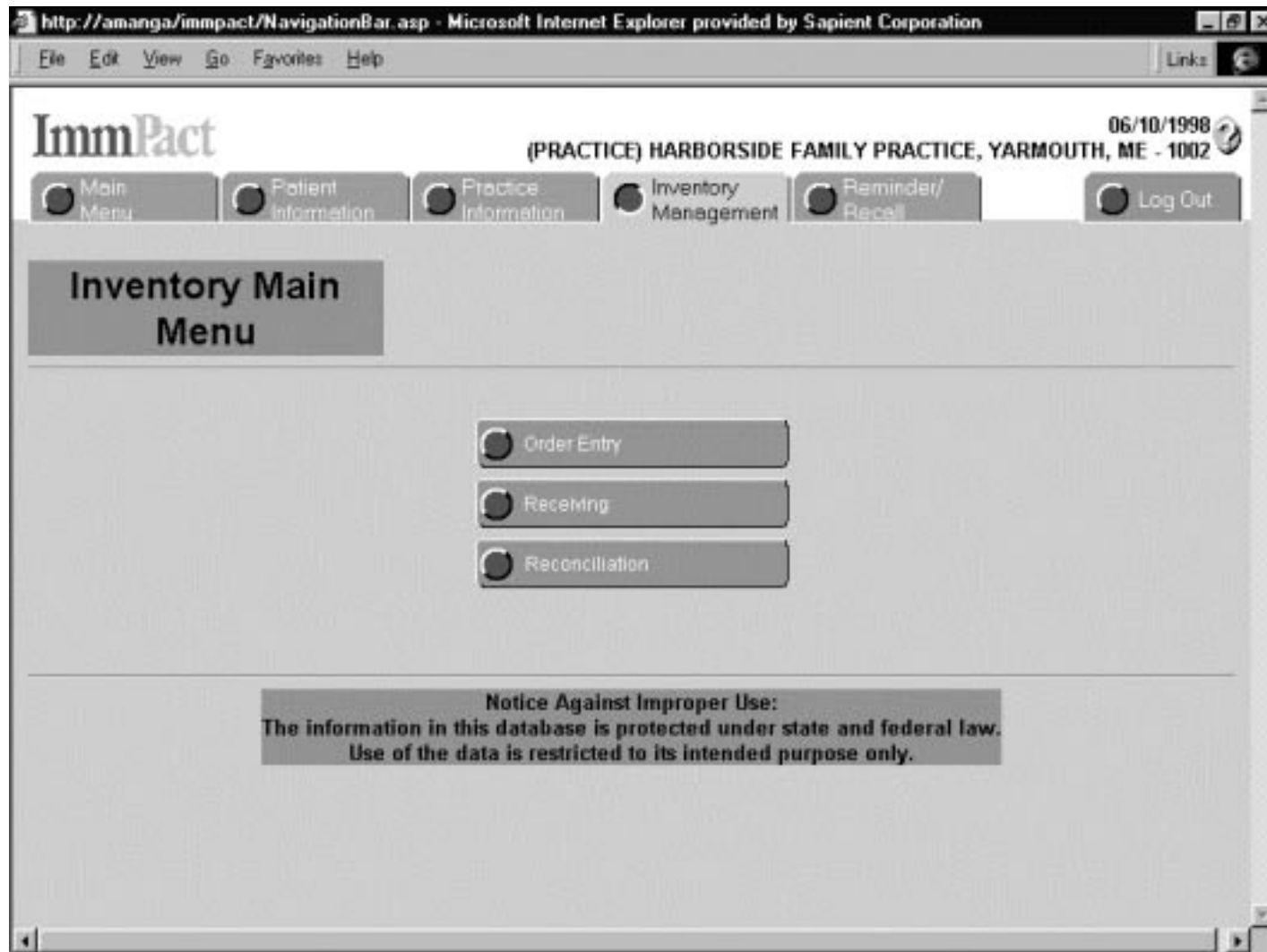
Record Vaccine Administration Edit Vaccination Record View Valid Doses Only Close

**Notice Against Improper Use:**  
The information in this database is protected under state and federal law.  
Use of the data is restricted to its intended purpose only.

ImmPact

*New Hampshire's Immunization Information System*

# Inventory Main Menu



**ImmPact**

*New Hampshire's Immunization Information System*

# Order Entry Screen

New Page - Microsoft Internet Explorer provided by Sapient Corporation

File Edit View Go Favorites Help Links

ImmPact

Inventory Management

06/10/1998  
(PRACTICE) HARBORSIDE FAMILY PRACTICE, YARMOUTH, ME - 1002

**Order Entry**

Vaccine Type *	Doses Ordered *	Balance On Hand	Doses Approved	Doses Shipped
CHOL	0	20	0	0
DILUENT	0	0	30	0
DT	0	29	0	0
DTAP	0	43	80	30
DTAP-HIB	0	29	10	0
DTP	0	0	20	10
DTP-HIB	0	43	0	0
EIPV	0	48	0	0
FLU	0	0	0	0
HBIG	0	0	0	0
HEP A	0	1	0	0
HEP A-AD	0	0	0	0

ImmPact

*New Hampshire's Immunization Information System*

## Batch

## Real Time

### Advantages

- \* Visible control of data transfer
- \* Registry and VACMAN are independent and don't require a connection.

- \* Instant transfer of data
- \* Requires no human intervention to transfer data

### Dis-Advantages

- \* Requires human to perform data transfer daily, weekly or monthly.

- \* Fast, full-time, reliable connection to VACMAN data must exist when Registry is running.

### \$\$ Cost

- \* Import/Export utilities are free and already included in VACMAN
- \* Must develop process for Registry to generate output data and/or accept input data in batch-mode. \$

- \* Interface Component (developed for ME & NH) will be free and available
- \* Must develop process for Registry to call Interface Component and handle data transfers *and handle error events*. \$\$\$



## Take this test!

This is not  
me at all.

This is  
definitely me!

- (1) I need Registry data to be transferred to VACMAN as quickly as possible.
- (2) I need VACMAN data to be transferred to Registry as quickly as possible.
- (3) I need to transfer data often and without human intervention.
- (4) I rely heavily on VACMAN's Inventory and Distribution functions.
- (5) I have the additional time and money needed to develop the real-time interface.
- (6) I can have a full-time, reliable connection between VACMAN and the Registry.

1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

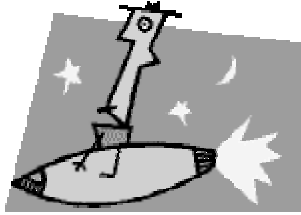
1 2 3 4 5

1 2 3 4 5

1 2 3 4 5

***Add your points together. If you score highly, consider a real-time interface!***





## For more information

Visit the VACMAN Web Site

<http://www.cdc.gov/nip/vacman>  
and click on System Interfaces.

### Sandra Kelsey

New Hampshire Immunization  
Program

phone 603-271-4463

email [skelsey@dhhs.state.nh.us](mailto:skelsey@dhhs.state.nh.us)

### Evan Willis

Data Management Division  
National Immunization Program  
Centers for Disease Control

phone 404-639-8229

email [eaw5@cdc.gov](mailto:eaw5@cdc.gov)

### Paula Rosenberg

New Hampshire Immunization  
Program

phone 603-271-4482

email [prosenbe@dhhs.state.nh.us](mailto:prosenbe@dhhs.state.nh.us)

### Jude Walsh

Maine Immunization Program

email [jude.e.walsh@state.me.us](mailto:jude.e.walsh@state.me.us)